



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/986,328	11/08/2001	Anders Andersson	3670-39	5582		
759	90 08/12/2004		EXAMINER			
NIXON & VA	NIXON & VANDERHYE P.C.			PEACHES, RANDY		
8th Floor 1100 North Gleb	ne Road	ART UNIT	PAPER NUMBER			
Arlington, VA 22201-4714			2686			
			DATE MAILED: 08/12/2004			

Please find below and/or attached an Office communication concerning this application or proceeding.

1 ~		Applic	ation No.	Applie	cant(s)			
Office Action Summary		09/986			ANDERSSON ET AL.			
		Exami			Art Unit			
			Peaches	2686				
	- The MAILING DATE of this commun	<u></u>		with the correspond	ondence address			
THE N - Exten after S - If the - If NO - Failur Any re	DRTENED STATUTORY PERIOD F MAILING DATE OF THIS COMMUN sions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this comr period for reply specified above is less than thirty (3 period for reply is specified above, the maximum st e to reply within the set or extended period for reply eply received by the Office later than three months d patent term adjustment. See 37 CFR 1.704(b).	ICATION. of 37 CFR 1.136(a). In no nunication. iii) days, a reply within the atutory period will apply an will, by statute, cause the	statutory minimum of d will expire SIX (6) N application to become	y a reply be timely filed thirty (30) days will be co MONTHS from the mailin e ABANDONED (35 U.S	onsidered timely. g date of this communication. S.C. § 133).			
Status								
1)	Responsive to communication(s) file	ed on						
2a) <u></u> □	This action is FINAL .	2b)⊠ This action i	s non-final.					
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
 4) ☐ Claim(s) 1-27 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-27 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. 								
Application	on Papers							
9) 🗆 -	The specification is objected to by th	e Examiner.						
	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	nder 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
Attachment	(s)							
1) Notice 2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (Fation Disclosure Statement(s) (PTO-1449 or No(s)/Mail Date		Paper N	w Summary (PTO-41 No(s)/Mail Date of Informal Patent App				

Art Unit: 2686

DETAILED ACTION

Specification

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making,
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

Examiner points out that words, e.g. "said", should not be used in the phraseology of the Abstract. Please note lines 4, 6, etc. Appropriate correction is required.

Art Unit: 2686

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 16 recites the limitation of a "Mobile Terminal" as being dependent upon the independent claim 1; however, claim 1 recites the limitations of a "Transceiver". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-3, 9-11, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Padovani et al. (U.S. Patent Number 6,574,211 B2) in view of Hortensius et al (U.S. Patent Number 6,252,854 B1).

Regarding *claims 1 and 10*, Padivani et al. discloses a Mobile Station (6), which reads on claimed "transceiver device (1)", adapted for transfer of data packets (see column 6 lines 44-48) and comprising measuring means for measuring a

Art Unit: 2686

value which corresponds to the quality of said transfer, which measured value is used to make decisions concerning said transfer (see column 6 lines 51-63).

However, Padivani et al. fails to expressly discloses wherein the said Mobile Station (6) includes a rate changing means for changing the transfer rate of said data packet transfer depending on said decision.

Hortensius et al teaches in column 6 lines 41-45 where a calculation is made to determine the rate of transmission, which reads on claimed "transfer rate", of data between two entities. A Rate Calculation Module (RCM) is used to determine the rate in which data is transferred between the entities when data is received a first time by a receiving entity.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Padovani et al. (U.S. Patent Number 6,574,211 B2) in view of Hortensius et al (U.S. Patent Number 6,252,854 B1 in order to provide a rate changing means effective to regulate the transmitting rate of data packets between the said Mobile Station and receiving entity.

Regarding *claim* 2, as the above combination of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1) are made, the combination according to *claim* 1, Padivani et al. further discloses in column 6 lines 51-66 where the said Mobile Station (6) measures the content of the forward link against the predetermined threshold values.

Art Unit: 2686

Regarding *claims 3, 11, 16 and 18* as the above combination of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1) are made, the combination according to *claims 1 and 10*, Padovani et al. further discloses in column 8 lines 45-47 where the transceiver is a included within a said Mobile Station (6), which reads on claimed "mobile phone system (cellular phone system)".

Regarding *claim 9*, as the above combination of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1) are made, the combination according to *claim 1*, Padovani et al. teaches in column 6 lines 36-48 where the said Mobile Station (6) is in communication with a base station (4), which reads on claimed "transceiver device".

Regarding *claim 17*, Padivani et al. discloses method for transfer of data packets between a Mobile Station (6), which reads on claimed "first transceiver (1)", and a base station (4), which reads on claimed "second transceiver (4)", said method comprising:

measuring, in said column 6 lines 51-66 where the said Mobile Station (6)
 measures the content of the forward link against the predetermined
 threshold values, and adapting the transmission rate of said transmission
 depending on whether said measured value exceeds said threshold value.

Art Unit: 2686

However, Padivani et al. fails to expressly discloses wherein the said Mobile Station (6) includes a rate changing means for changing the transfer rate of said data packet transfer depending on said decision.

Hortensius et al teaches in column 6 lines 41-45 where a calculation is made to determine the rate of transmission, which reads on claimed "transfer rate", of data between two entities. A Rate Calculation Module (RCM) is used to determine the rate in which data is transferred between the entities when data is received a first time by a receiving entity.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Padovani et al. (U.S. Patent Number 6,574,211 B2) in view of Hortensius et al (U.S. Patent Number 6,252,854 B1 in order to provide a rate changing means effective to regulate the transmitting rate of data packets between the said Mobile Station and receiving entity.

3. Claims 4, 8, 12, 15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1) in further view of Lincke et al. (U.S. Patent Number 6,590,588 B2).

Regarding *claims 4, 12, and 19* as the above combination of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1) are made, the combination according to *claims 1 and 10*, fails to

Art Unit: 2686

disclose where the said Mobile Station is characterized, in that, it is used in a Mobitex system.

Lincke et al. discloses in column 10 lines 29-42, where the wireless communication device is used in a Mobitex system.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1 to further include Lincke et al. (U.S. Patent Number 6,590,588 B2) in order for the said Mobile Station (6) the ability to communicate in low bandwidth networks, such as the Mobitex system.

Regarding *claims 8 and 15*, as the above combination of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1) are made, the combination according to *claims 1 and 10*, fails to disclose where the said Mobile Station (6) is characterized in that the wireless packet data network is combined with a wire-bound network.

Lincke et al. discloses in column 2 lines 5-25 where the wireless communication is provided for mobile users to communicate with wire-networks.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1 to further include Lincke et al. (U.S. Patent Number 6,590,588 B2) in order to allow for the transfer of High-bandwidth data packets,

Art Unit: 2686

e.g. internet information.

4. Claims 5-6, 7, 13-14, 20-21, 23-24, and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1) in further view of Sweitzer et al. (U.S. Patent Number 6,546,046 B1).

Regarding *claims 5, 13 and 20*, as the above combination of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1) are made, the combination according to *claims 1, 10 and 17*, fails to disclose wherein a selecting means for selecting one of the three data transmission rates low, default or high.

Sweitzer et al teaches in column 4 lines 55-67, where speed ranging from 144kbps (low) to 208Kbps (high) or to a previous rate (see column 15 line 22), which reads on claimed "default".

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1 to further include Sweitzer et al. (U.S. Patent Number 6,546,046 B1) in order for the said system to have the capability to vary its transmission rate by supporting a range of speeds. Additionally, this will allow

Art Unit: 2686

the system to perform efficiently when encountered with different rate dependent elements within the network.

Regarding *claims* 7 *and* 27, as the above combination of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1) are made, the combination according to *claims* 1, 10 and 17, fails to disclose wherein a system is characterized in that a timer is used at the transceiver device (1), said timer indicating whether it is still suitable to use a data transmission rate separate from the default data transmission rate, i.e. if the timer has not expired when a new message is about to be sent, the same data transmission rate is used as last time.

Sweitzer et al teaches of a timer, as taught in column 8 lines 40-50, indicating whether it is suitable to use a data transmission rate separate from the default data transmission rate, i.e. if the timer has not expired when a new message is about to be sent, the same data transmission rate is used as last time. See column 9 lines 47-60.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1 to further include Sweitzer et al. (U.S. Patent Number 6,546,046 B1) in order for the system to avoid having to re-calculate a transmission rate; thus, improving the efficiency of the transmission of data in the network.

Art Unit: 2686

Regarding *claim* 23, as the above combination of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1) are made, the combination according to *claim* 17, fails to disclose a method characterized in that it comprises extending a transmission in time when doing a retransmission of a data block that has been considered as erroneous using a lower data rate.

Sweitzer et al teaches in column 2 lines 45-49 where when transmitting a lower data rate, the time spent to establish a connection due to transmission of data is higher than that of transmitting at a higher data rate.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1 to further include Sweitzer et al. (U.S. Patent Number 6,546,046 B1) so that when the transmission of data contain errors, the system is forced to transmit in an extended amount of time because of the lower rate of transmission.

Regarding *claim 24*, as the above combination of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1) are made, the combination according to *claim 17*, fails to disclose a method characterized in that it comprises information whether the base station (4)is

Art Unit: 2686

capable of data transmission rates separate from the default data transmission rate in the subscriber information.

Sweitzer et al teaches in column 11 lines 12-30 where the recommended rate is not acceptable, the lower nearest rate is utilized.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1 to further include Sweitzer et al. (U.S. Patent Number 6,546,046 B1) in order for the said system to have the capability to vary its transmission rate by supporting a range of speeds. Additionally, this will allow the system to perform efficiently when encountered with different rate dependent elements within the network.

Regarding *claim* 26, as the above combination of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1) are made, the combination according to *claim* 17, fails to disclose in that it comprises performing measurements of transfer quality at the said Mobile Station (6) during all receptions from the said base station (4).

Sweitzer et al teaches in column 3 lines 5-28, where the DTU-R measures the quality of the lines when receiving the probe signal from the DTU-C. The DTU-R then sends the line quality measurements back to the DTU-C.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of

Art Unit: 2686

Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1 to further include Sweitzer et al. (U.S. Patent Number 6,546,046 B1) so that both the receiving and transmitting elements are able to "negotiate" a transfer data rate based on the line quality measurement.

Regarding *claims* 6, 14, and 21, as the above combination of Padovani et al. (U.S. Patent Number 6,574,211 B2), Hortensius et al (U.S. Patent Number 6,252,854 B1) and Sweitzer et al. (U.S. Patent Number 6,546,046 B1) are made, the combination according to *claims* 5, 13 and 20, fails to expressly recite the data rates of 25% and 600%; however, the combination generally teaches of the slower and faster rates as shown in Sweitzer et al. in Table 1. Being that the applicant has failed to disclose the pertinence of the cited values or that they may solve any particular problem, it is considered that the respected cited rates of 25% and 600% merely fall within the expected range of what would be considered a slower and faster rate and would have been obvious choice to one of ordinary skill in the art at the time the invention was made to chose such a percentage that would represent the minimum and maximum transfer rates data is traversing between the said elements.

5. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1) in further view Wainfan et al. (U.S. Patent Number 6,669,707 B1).

Art Unit: 2686

Regarding *claim* 22, as the above combination of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1) are made, the combination according to *claim* 17, fails to expressly disclose wherein the method is characterized in that it comprises increasing the amount of error-correcting codes when the data transmission rate is decreased.

Wainfan et al. discloses in column 6 lines 20-39, where the data rate is adjusted by placing error correction bits in the signal.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1 to further include Wainfan et al. (U.S. Patent Number 6,669,707 B1) in order to increase the reliability of the message when the data rates decreases.

6. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1) in further view Mahany et al. (U.S. Patent Number 5,682,379).

Regarding *claim* **25**, as the above combination of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1) are made, the combination according to *claim* **17**, fails to expressly disclose

Art Unit: 2686

wherein the method comprises stating in the first data block which data transmission rate that is used for the following data blocks for all transmissions from the first transceiver (1) to the second transceiver (4).

Mahany et al. discloses in column 15 lines 20-28 where a new data rate is transmitted in a header to expressly dictate to the receiving device the newly selected data transmission rate.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of Padovani et al. (U.S. Patent Number 6,574,211 B2) and Hortensius et al (U.S. Patent Number 6,252,854 B1 to further include Mahany et al. (U.S. Patent Number 5,682,379) in order to provide a means to identify a new transmission rate to the receiver, dictating the upcoming rate of future transmission of information.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy Peaches whose telephone number is (703) 305-8993. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2686

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Randy Peaches August 4, 2004

> CHARLES APPIAH PRIMARY EXAMINER